This Page is Inserted by IFW Indexing and Scanning Operations and is not part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ BLACK BORDERS
- ☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
- ☐ FADED TEXT OR DRAWING
- ☐ BLURRED OR ILLEGIBLE TEXT OR DRAWING
- ☐ SKEWED/SLANTED IMAGES
- ☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS
- ☐ GRAY SCALE DOCUMENTS
- ☐ LINES OR MARKS ON ORIGINAL DOCUMENT
- ☐ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
- ☐ OTHER: _____

IMAGES ARE BEST AVAILABLE COPY.
As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.

PCT WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 : H04Q 7/22, 3/00 — A1

(11) International Publication Number: WO 99/33293

(43) International Publication Date: 1 July 1999 (01.07.99)

(21) International Application Number: PCT/US98/26785

(22) International Filing Date: 16 December 1998 (16.12.98)

(30) Priority Data:
08/996,524 23 December 1997 (23.12.97) US

(71) Applicant: GLOBAL MOBILITY SYSTEMS, INC. [US/US]; Suite 110, 11201 S.E. 8th Street, Bellevue, WA 98004 (US).

(72) Inventor: DENNIS, Charles, L.; 20804 N.E. 141st Street, Woodinville, WA 98072 (US).

(74) Agents: TANNENBAUM, David, H. et al.; Fulbright & Jaworski L.L.P., Suite 2800, 2200 Ross Avenue, Dallas, TX 75201 (US).

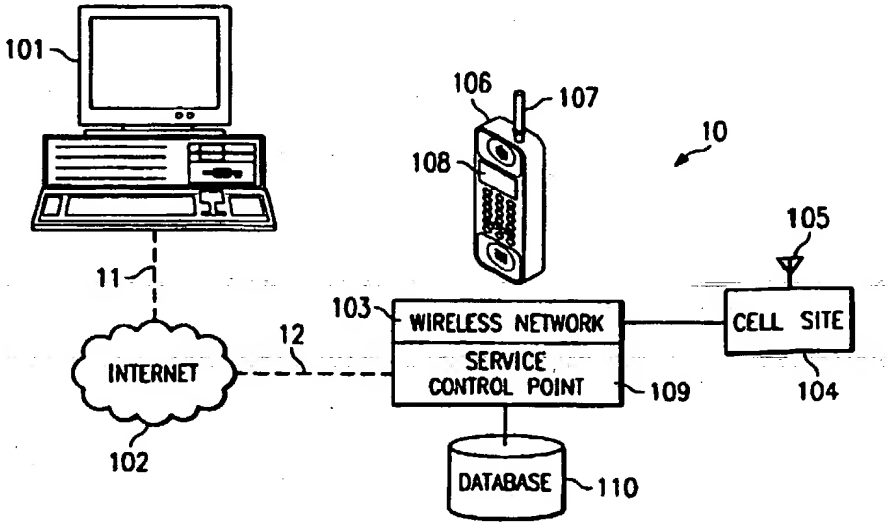
(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published
With international search report.

PHGB 000048WO MAT. DOSSIER

BEST AVAILABLE COPY

(54) Title: SYSTEM AND METHOD FOR CONTROLLING PERSONAL INFORMATION AND INFORMATION DELIVERY TO AND FROM A TELECOMMUNICATIONS DEVICE



(57) Abstract

A system and method for collecting and managing personal information is disclosed. The personal information is stored as a personal profile for the user of a wireless device (106). The user connects to the internet (102) and accesses a personal profile application on a world wide web site. The personal profile application is used to create and modify a personal profile for the user. The personal profile configuration is provided to a wireless network (103) which uses the profile to control information that is provided to the user via the wireless device (106). Information can be provided to the user based upon the user's location or based upon certain selected time periods. The user can also indicate particular financial accounts that are used to complete certain financial transactions.

FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AL	Albania	**ES**	Spain	**LS**	Lesotho	**SI**	Slovenia
AM	Armenia	**FI**	Finland	**LT**	Lithuania	**SK**	Slovakia
AT	Austria	**FR**	France	**LU**	Luxembourg	**SN**	Senegal
AU	Australia	**GA**	Gabon	**LV**	Latvia	**SZ**	Swaziland
AZ	Azerbaijan	**GB**	United Kingdom	**MC**	Monaco	**TD**	Chad
BA	Bosnia and Herzegovina	**GE**	Georgia	**MD**	Republic of Moldova	**TG**	Togo
BB	Barbados	**GH**	Ghana	**MG**	Madagascar	**TJ**	Tajikistan
BE	Belgium	**GN**	Guinea	**MK**	The former Yugoslav Republic of Macedonia	**TM**	Turkmenistan
BF	Burkina Faso	**GR**	Greece			**TR**	Turkey
BG	Bulgaria	**HU**	Hungary	**ML**	Mali	**TT**	Trinidad and Tobago
BJ	Benin	**IE**	Ireland	**MN**	Mongolia	**UA**	Ukraine
BR	Brazil	**IL**	Israel	**MR**	Mauritania	**UG**	Uganda
BY	Belarus	**IS**	Iceland	**MW**	Malawi	**US**	United States of America
CA	Canada	**IT**	Italy	**MX**	Mexico	**UZ**	Uzbekistan
CF	Central African Republic	**JP**	Japan	**NE**	Niger	**VN**	Viet Nam
CG	Congo	**KE**	Kenya	**NL**	Netherlands	**YU**	Yugoslavia
CH	Switzerland	**KG**	Kyrgyzstan	**NO**	Norway	**ZW**	Zimbabwe
CI	Côte d'Ivoire	**KP**	Democratic People's Republic of Korea	**NZ**	New Zealand		
CM	Cameroon			**PL**	Poland		
CN	China	**KR**	Republic of Korea	**PT**	Portugal		
CU	Cuba	**KZ**	Kazakstan	**RO**	Romania		
CZ	Czech Republic	**LC**	Saint Lucia	**RU**	Russian Federation		
DE	Germany	**LI**	Liechtenstein	**SD**	Sudan		
DK	Denmark	**LK**	Sri Lanka	**SE**	Sweden		
EE	Estonia	**LR**	Liberia	**SG**	Singapore		

BNSDOCID: <WO_ _ 9933293A1_I >

SYSTEM AND METHOD FOR CONTROLLING PERSONAL INFORMATION AND INFORMATION DELIVERY TO AND FROM A TELECOMMUNICATIONS DEVICE

RELATED APPLICATIONS

This application is related to application Serial No. (P003US), SYSTEM AND METHOD FOR CONTROLLING FINANCIAL TRANSACTIONS OVER A WIRELESS NETWORK, filed concurrently with this application and incorporated by reference herein. These applications are commonly assigned.

TECHNICAL FIELD OF THE INVENTION

The present invention relates to a system and method for collecting and managing personal information and, more particularly, to establishing a personal profile on a world wide web site and using the personal profile to control information that is provided to telecommunications devices to control services provided to or from such devices.

BACKGROUND OF THE INVENTION

Intelligent wireless systems, such as those that comply with the IS-136 standard, allow wireless telephones to be used for more than just voice communications. An e-mail address can be assigned to an intelligent wireless device in addition to the traditional telephone number. This allows text messages to be sent to the wireless device. The text messages can be displayed directly on the wireless telephone for the user. Intelligent wireless systems also provide users with more function buttons than are present on standard wireless keypads.

The increased functionality of intelligent wireless systems allows wireless service users to receive information in a variety of formats. This information can also come from many sources. There is no system or method in the prior art which allows an intelligent wireless service user to control all of the information that can be provided to a particular wireless device. As a result, the user has to establish individual accounts and profiles with each information or financial service provider.

SUMMARY OF THE INVENTION

The present invention provides a system and method for users to control the delivery of information to a wireless device and to control services provided to the device. The user establishes a personal profile on a network, such as the internet, and the profile is used to determine which types of information should be sent to the wireless device. The profile can also specify the format of the information and the timing of the information. The user accesses an interactive computer application to establish his/her personal profile. The personal profile application may be on an internet world wide web page so that many users are able to easily access the application. The personal profile is maintained on a personal profile server which tracks the options selected by the user.

After a user has configured his/her personal profile, the profile is translated into information that can be used by a wireless service provider. The information is used by a wireless network to control the information that is provided to the user's wireless device. The wireless network receives information from a variety of sources and, using the personal profile, identifies specific information that has been requested by the user. This information is then sent to the user's wireless device.

The user can also use the wireless device to request information or to complete financial transactions. The personal profile application tracks these transactions and maintains a list of past transactions for the user. The user can review the list of past transactions by accessing the personal profile web page or by requesting information on the wireless device.

Users establish their accounts by accessing the personal profile site and providing information, such as identification and billing data. Each user is then presented with a number of options in various categories. Information that can be selected includes such items as sports scores, stock prices, and banking and credit card account information. The information can also be used to reconfigure the network with respect to a particular user and to control the provision of services with respect to each user. The personal profile is configured by the user so that the certain information is sent at selected intervals. The user can choose to have information sent at certain times, such as at

regular intervals, or the information may be sent only when the user is in a specific location. The user can also access the personal profile to modify or update information to be sent to the wireless device.

A service control point, or some other device in a wireless network, receives information from various sources and stores the information in a database. This information can be received via the internet or some other connection, such as a direct connection to the information source. The user's selections in the personal profile are correlated with the stored information. The wireless network is used to send the requested information to the user's wireless device.

The personal profile can also be configured to identify certain accounts that are to be used during financial transactions. For example, the user can select a specific bank account or credit card account that should be charged for financial transactions that are completed using the wireless device. When the user completes a transaction or manages information that is sent to the wireless device, then that transaction data and information is captured by the personal profile. This gives the user the option of maintaining a record of all wireless transactions. The user could then update the personal profile configuration based upon these transactions.

It is a feature of the present invention to provide a system and method for receiving and maintaining information in a wireless network user's personal profile, wherein the profile is used to control information that is provided to the user's wireless device.

It is another feature of the present invention to provide a personal profile for a wireless device user. An application for establishing and configuring the personal profile is also provided. In one embodiment the user can access the personal profile application through a world wide web site.

It is a further feature of the present invention to allow users to configure various types of information that are provided to a wireless device, such as the format of the information and the times at which the information is transmitted.

It is an additional feature of the present invention to create a personal profile for a wireless device user which identifies financial information that can be used to complete financial transactions via said wireless device.

A feature of the present invention is a wireless network that is capable of using a user's personal profile and correlating that profile with information provided from other sources. The wireless network is also capable of sending the correlated information to the user's wireless device according to options selected in the user's personal profile.

The foregoing has outlined rather broadly the features and technical advantages of the present invention in order that the detailed description of the invention that follows may be better understood. Additional features and advantages of the invention will be described hereinafter which form the subject of the claims of the invention. It should be appreciated by those skilled in the art that the conception and the specific embodiment disclosed may be readily utilized as a basis for modifying or designing other structures for carrying out the same purposes of the present invention. It should also be realized by those skilled in the art that such equivalent constructions do not depart from the spirit and scope of the invention as set forth in the appended claims.

BRIEF DESCRIPTION OF THE DRAWINGS

For a more complete understanding of the present invention, and the advantages thereof, reference is now made to the following descriptions taken in conjunction with the accompanying drawings, in which:

FIGURE 1 is a high level block diagram of a system incorporating the present invention;

FIGURE 2 is a typical world wide web display for use with the present invention;

FIGURE 3 is another typical world wide web display for use with the present invention;

FIGURE 4 is another typical world wide web display for use with the present invention;

FIGURE 5 is another typical world wide web display for use with the present invention;

FIGURE 6 is another typical world wide web display for use with the present invention;

FIGURE 7 is another typical world wide web display for use with the present invention; and

FIGURE 8 is another typical world wide web display for use with the present invention;

DESCRIPTION OF THE PREFERRED EMBODIMENTS

FIGURE 1 shows system 10 in which terminal 101 is linked to wireless network 103 through internet 102. Terminal 101 may be any device, such as a personal computer (PC), which allows a user to access internet 102. Terminal 101 is connected to internet 102 via communications link 11. Communications link 11 can be embodied in any number of well-known ways, such as a direct connection between terminal 101 and internet 102 or a connection through a commercial internet service provider. Communication link 11 may be a data bus, local area network (LAN), dedicated telephone line, wireless connection or any other means for transmitting data from one location to another.

In the preferred embodiment of the present invention, a user at terminal 101 accesses one or more world wide web sites on internet 102 to configure a personal profile. The process of establishing a personal profile will be discussed in more detail below in the description of FIGURES 2-8. The personal profile web site allows the user to select information from a variety of categories, such as sports, travel and financial, and to select how frequently information from these categories should be provided to the user. Typically, the information will be provided to the user via a wireless device, such as wireless telephone 106.

The information gathered on the personal profile web site is managed by a personal profile server which allows the user to modify and update the personal profile. The personal profile server is coupled to the personal profile web site on internet 102. The personal profile server also interacts with wireless network 103 by providing the user's profile data to wireless network 103 through service control point (SCP) 109 and communications link 12.

In addition to providing an interface for the personal profile server, SCP 109 receives information, such as sports scores, airline schedules or stock quotations, from a number of sources and stores the information in database 110. SCP 109 can receive this information through internet 102 via link 12 or the information can be provided directly from the source, for example, directly from a sporting venue, an airline scheduling office

or a stock exchange. Any of these information sources can be directly connected to SCP 109 by a dedicated or dial-up telephone connection, wireless connection, or any other communications link that allows data transmission.

It will be understood that SCP 109 may operate in conjunction with other well-known telecommunications system components (not shown), such as a service node (SN) or an intelligent peripheral (IP).

The information maintained by SCP 109 corresponds to the options that are available in the user's personal profile. SCP 109 correlates selected personal profile options with the information in database 110 and determines the data that should be sent to the user. For example, if a user selects sports score options on the personal profile, then SCP 109 will update the user's record in database 110 whenever sports scores are received. At periodic intervals, SCP 109 will then send sports score information to wireless device 106 via wireless network 103. The information will be displayed to the user on display 108 of wireless device 106.

It will be understood that the present invention is not limited to establishing profiles strictly over internet 102. In an alternative embodiment, the user could establish a personal profile on a separate proprietary interactive network that provides a link between the user and wireless network 103. In another embodiment, terminal 101 could connect directly to SCP 109 or some other component of wireless network 103 and the personal profiles could be configured and updated directly on wireless network 103.

Wireless network 103 is comprised of a number of cell sites 104 which allow network 103 to communicate with wireless device 106 via antennas 105 and 107. Each cell site 104 serves a specific geographic area and, as a result, wireless network 103 can identify a user's location by determining which cell site 104 is in communication with the user. The accuracy of network 103's location identification for a user depends upon a number of factors, such as the size of the area that is covered by cell site 104 and the type of equipment used in network 103. If cell site 104 is a micro-cell or pico-cell that serves a very limited area, then network 103 will have improved location accuracy. Other mobile wireless device locating methods can also be used to improve location

accuracy, such as the spatial division multiple access and smart antenna techniques described in U.S. Patent No. 5,508,707, titled METHOD FOR DETERMINING POSITION BY OBTAINING DIRECTIONAL INFORMATION FROM SPATIAL DIVISION MULTIPLE ACCESS (SDMA)-EQUIPPED AND NON-SDMA-EQUIPPED BASE STATIONS, assigned to U S WEST Technologies, Inc., and U.S. Patent No. 5,515,378, titled SPATIAL DIVISION MULTIPLE ACCESS WIRELESS COMMUNICATION SYSTEMS, assigned to ArrayComm, Inc., the disclosures of which are incorporated by reference herein.

The present invention can take advantage of these position locating techniques and modify the information that is provided from wireless network 103 to device 106 based upon the user's location. The user could configure the personal profile so that certain information is displayed whenever the user is in a particular area. For example, the user could configure the personal profile to display gate information when the user is at the airport or to display account balance information when the user is at an automated teller machine. Merchants and businesses could provide information to SCP 109 so that other location-specific options are available to users. The merchant or business could supply information to SCP 109 through internet 102, or over some other connection, and SCP 109 could make the information available to users. For example, if the user selected a particular grocery store or chain of grocery stores on the personal profile, then, whenever the user entered that store, wireless network 103 would note the user's location and a list of sale items would be sent to wireless device 106. The personal profile could be configured by the user to be even more specific, so that prices are displayed only for selected items, brands or sizes.

In addition to providing personal profile information to the user via device 106, SCP 109 can also monitor the user's transactions and the activity on wireless device 106. In one embodiment, SCP 109 and network 103 are part of a financial management system which allows the user to complete transactions via wireless device 106 as disclosed in copending application Serial No. (P003US). In this embodiment, SCP 109 sends financial transaction information to the personal profile server where it is recorded in the user's personal profile. When the user accesses the personal profile web site, they

are presented with a list of completed transactions to review. This information could be used by the user to modify the personal profile for future transactions.

FIGURES 2-8 are typical displays that would be presented to the user on terminal 101 in a preferred embodiment of the personal profile web site. FIGURE 2 is initial screen 20 which prompts a previously registered user for an e-mail address, or other identifier, and a password. A new user would be presented with a different screen (not shown) on his/her first connection to the personal profile web site. The new user screen could be used to initiate a new account. The new user would be prompted for information such as name, e-mail address, billing information, future log-in ID and password, wireless service provider and wireless telephone number. After the user initiates a new account, or enters the password for an existing account, then the personal profile web site displays screen 30 as shown in FIGURE 3.

Screen 30 identifies the user that has logged-in by listing the account holder's name and the type of account. Other information could also be shown on this display, such as the telephone number of a particular wireless device 106 that is assigned to the account or the name of the wireless service provider. The user can select a number of options from screen 30. "Return to Homepage" option 32, and other well-known web page options (not shown), allow the user to navigate among web pages and sites on internet 102. The options in block 31 are specific to the personal profile application and they allow the user to configure or modify information or features in the personal profile.

When the user selects the "Messaging Management" option in block 31, then screen 40 (FIGURE 4) is displayed on terminal 101. Screen 40 allows the user to configure the method by which various types of messages are routed. Wireless device 106 is assigned a telephone number and, in the preferred embodiment, an e-mail address. Communications with device 106 can be directed to either the telephone number or the e-mail address. Typically, voice communications will be associated with the telephone number and data communications associated with the e-mail address. Data communications and e-mail messages are displayed for the user on screen 108.

Alternatively, the user could select certain options so that e-mail messages are routed to some other destination.

At times wireless network 103 may be unable to connect callers to wireless device 106, for example, if telephone 106 is not turned on, or when the user is outside the service area of wireless network 103, or when telephone 106 is already connected to another call. In these situations the user may choose to have incoming calls routed to a messaging application in wireless network 103. The messaging application would allow incoming callers to record messages for later retrieval by the user. These recorded messages could be retrieved in a number of ways. For example, the user could choose to have the messaging application call and play the recorded message as soon as wireless device 106 is available. Another option would convert voice messages to a data file, such as a .WAV file, which could be retrieved via terminal 101.

Certain calls to device 106 could be identified as facsimile transmissions. For instance, the user could configure the personal profile to pre-identify certain telephone numbers as being assigned to facsimile machines, then when network 103 detects incoming calls from these numbers, such as by a caller ID feature, it could route the call as provided in personal profile option 40. In another embodiment, network 103 could monitor the initial portion of an incoming call to detect if facsimile machine handshake and protocol tones are being transmitted, then if the call is determined to be a facsimile transmission it would be directed according to the personal profile option selected in block 40. The user could choose to have facsimile transmissions directed to the user's home or office facsimile machine or to the personal profile server where they would be held for later display on terminal 101.

If the user selects the "Caller Group" option from block 31, then screen 50 (FIGURE 5) is displayed. Block 51 in screen 50 allows the user to select options for various caller groups, such as for family or work. Using the caller group options, the user could track calls that are made to a specific party or, with a caller ID function, track calls that have been received from certain parties. The user could also prioritize, or otherwise distinguish, particular groups or individuals for special call handling. For example, calls from certain numbers or parties could be routed to the messaging

application instead of being connected to wireless device 106, or calls from certain parties could be identified by a distinct ring signal, or the user could route selected callers to another telephone number during certain times of the day, such as routing customers to a secretary if wireless telephone 106 is busy during business hours.

FIGURE 6 shows screen 60 which is displayed when the user selects the "Financial Management" option in block 31. In block 61 the user selects financial information, such as stock quotations, that is to be sent to wireless device 106. The personal profile can be configured so that stock quotations are displayed on screen 108 at selected intervals, such as every hour or at the close of trading. Particular stocks or groups of stocks can also be identified. In one embodiment the user can choose to have a particular stock price displayed on screen 108 when a certain stock goes above or drops below a selected limit.

The user's financial options in the personal profile are sent to SCP 109 and stored in database 110. SCP 109 also receives stock prices and market information. The stock prices received by SCP 109 are monitored and correlated to the financial profile of each user. SCP 109 then transmits the stock information to each user via network 103 based upon his/her personal profile. In another embodiment, SCP 109 can also be configured to accept the user's buy and sell orders over wireless device 106. For example, if the user has requested notification when a particular stock drops below a certain price, then, when that stock does falls below the set price, SCP 109 could transmit the price data to device 106 along with a message inquiring whether the user desires to place a buy order. The user can then complete the transaction using a preestablished trading account that is identified on his/her personal profile.

In block 62 the user can identify bank accounts or other accounts to be monitored by the present invention. The user can select different types of transactions, such as deposits or withdrawals, that will be monitored for each account and a notice is sent to device 106 whenever on of the selected transactions occurs. For example, a user who has his/her paycheck directly deposited to a checking account may desire to be notified of all deposits on the 15th and 30th day of each month. SCP 109 receives account information from banking networks and correlates this information to the user's

personal profile. In the present example, SCP 109 matches a paycheck deposit, for instance on January 15th, with the user's profile and then transmits a message to device 106 notifying the user that a checking account deposit has been made for a particular amount.

Screen 62 can also be used to track credit card transactions. By providing a credit card number and selecting certain notification parameters, the user could detect fraud or be warned when a credit limit is approaching. SCP 109 receives information from credit card companies and correlates the information with the user profiles. The users are notified when certain parameters are met. For example, when credit card transactions over a certain limit are detected, the user is notified. If the transaction was not authorized, then the user would be alerted to a possible stolen credit card. In another situation, the user could request to be notified when his/her credit card balance passes a certain level or when the balance is within a certain dollar amount of the credit limit.

Screen 70 (FIGURE 7) illustrates the options that are available to the user under the "Travel Information" category. The user could select airline information, such as having gate information sent to device 106 when a certain flight is about to arrive. Other information, such as flight delays or cancellations, could also be sent for selected flights. The user could also choose to have a reminder sent a certain amount of time before a particular flight was scheduled to depart. This would prompt the user to get to the airport in time for the flight. Also, if the user was on a multi-leg flight, the information on screen 70 could be configured to notify the user whether a connecting flight was on time or delayed.

The present invention can also provide the user with direct access to a travel agency or airline reservation system (not shown), such as the SABRE travel reservation system. This would allow the user to schedule flights or make other travel arrangements and, at the same time, configure how related information will be presented on device 106. For example, after users make hotel reservations, system 10 could send the name and address of the hotel or other information, such as a confirmation number for hotel

reservations. The travel or airline reservation system could be connected to system 10 through any number of connections, such as via internet 102 or wireless network 103.

In FIGURE 8, screen 80 presents the user with options to configure the "Sports Scores" category. In block 81, the user selects various sports and teams to be tracked. The user also selects certain types of information that is to be sent to device 106, such as hourly game scores or daily league rankings.

It will be understood that the present invention is not limited to the types of information or displays that are discussed above. Many other forms of information can be incorporated into the user's personal profile and displayed on the user's wireless device. For instance, a calendar application could be connected to the user's personal profile and messages could be sent to device 106 to remind the user of meetings, birthdays and anniversaries.

Various news and information services could also be incorporated into the present invention. For instance, the user could select to have a "headline news" service send a synopsis of the day's top stories or notify the user of breaking news events. The user could also limit the news stories to certain categories, such as financial news or sports news.

The present invention has been described as a system in which SCP 109 maintains the personal profile data for each user and also receives information from a variety of other sources. It will be understood that other components of network 103, instead of SCP 109, can correlate personal profile data with the other information and transmit the information to wireless device 106.

In another embodiment of a system incorporating the concepts of the present invention, the personal profile server could communicate directly with information sources, such as banking networks, credit card companies, news services or airlines. In this embodiment, the information source could track specific user options and then notify SCP 109, or some other component of wireless network 103, when relevant information should be sent to the user. For example, if a user configures the personal profile to send information about bank account activity, then the personal profile server

could notify the relevant banking network of the request. Thereafter, whenever there is activity in the user's bank account, the banking network could send the information to the user's wireless device 106 either directly, through wireless network 103, or routed through service control point 109. This embodiment would reduce, and potentially eliminate, the processing and correlation operations that are required in SCP 109 and network 103.

It will be further understood that the user's access to the personal profile information is not limited to terminal 101. The user can also access the profile in other ways. For example, the user could modify or configure the profile using wireless device 106. A series of menus could be displayed on screen 108 to provide configuration options to the user. The user could then scroll through the options and select or deselect various options as appropriate. This would allow the user to modify the personal profile from any location served by wireless network 103. Also, by accessing the personal profile server, the user could request specific information to be sent to device 106. While the illustrative embodiment has illustrated wireless devices, such as cell phones and pagers, any type of wireless device may be used. In addition, any device, such as a land line telephone can be used to access a personal profile so that the user can change the profile so as to control services provided to or from the device. The internet can be used, via interaction with the keypad and using voice commands to or from the device.

Although the present invention and its advantages have been described in detail, it should be understood that various changes, substitutions and alterations can be made herein without departing from the spirit and scope of the invention as defined by the appended claims.

WHAT IS CLAIMED IS:

1. A system for managing personal profiles wherein said profiles are configured by wireless device users and said profiles are used to control interactions between said wireless device users and a wireless network, said system comprising:

means for maintaining a plurality of said personal profiles;

means for providing user access to said personal profiles; and

means for selecting information that is provided to said wireless device users based on said personal profiles.

2. The system of claim 1 wherein said maintaining means comprises:

a database operable for holding said plurality of profiles.

3. The system of claim 2 wherein said database is connected to a service control point in said wireless network.

4. The system of claim 1 wherein said providing means is a computer coupled to said wireless network through a computer network.

5. The system of claim 1 wherein said personal profile maintaining means is coupled to said wireless network and wherein said providing means comprises:

a personal computer coupled to said wireless network via the Internet.

6. The system of claim 1 wherein said selecting means is a service control point in said wireless network.

7. The system of claim 1 further comprising:

means for accepting information from third parties; and

means for storing said third party information.

8. The system of claim 7 wherein said accepting means receives said third party information via an Internet connection.

9. The system of claim 7 wherein said storing means comprises:

a database.

10. The system of claim 9 wherein said storing means and said maintaining means comprise a single database in said wireless network.

11. The system of claim 7 wherein said selecting means selects a portion of said third party information to be provided to said wireless device users.

12. A method for providing information to control a telecommunications switching network's wireless devices using personal profile data configured by users of said wireless devices comprising the steps of:

maintaining a plurality of personal profiles in a database;

receiving information from third parties; and

using said personal profiles to determine a portion of said third party information that is to be provided to said wireless devices.

13. The method of claim 12 wherein said database is a coupled to a wireless network.

14. The method of claim 12 further comprising the step of:

allowing said users to access said personal profiles.

15. The method of claim 14 wherein said providing step further comprises the step of:

connecting said users to said personal profile database via a computer network.

16. The method of claim 15 further comprising the step of:
allowing users to modify a personal profile configuration.

17. The method of claim 15 wherein said computer network is the Internet.

18. The method of claim 12 wherein said maintaining and said receiving steps are performed by a service control point in a wireless network.

19. The method of claim 12 wherein said third party information is received via an Internet connection.

20. An information management system for a wireless network comprising:
means for storing a plurality of personal profiles for wireless network users;
means for receiving information from at least one source;
means for correlating said received information with said personal profiles; and
means for providing said correlated information to control services for said wireless network.

21. The system of claim 20 further comprising:
means for establishing user access to said personal profiles.

22. The system of claim 21 wherein said establishing means comprises an Internet connection between said users and said system.

23. The system of claim 20 wherein said storing means is a personal profile database.

24. The system of claim 20 wherein a service control point in a wireless network comprises said receiving, correlating and providing means, and

wherein a database coupled to said service control point comprises said storing means.

25. A personal profile database for a system that receives information from one or more sources and correlates said received information with said personal profiles to determine a portion of said received information that should be provided to a user, said database comprising:

data identifying specific users;

data corresponding to particular categories of information that said users desire to receive; and

data identifying specific wireless devices that are to receive information selected by said users.

26. The personal profile database of claim 25 further comprising:

data that indicates a frequency at which said selected information should be provided to said users.

27. The personal profile database of claim 26 wherein said categories of information comprise:

financial management categories for identifying one or more financial accounts.

28. The personal profile database of claim 27 wherein said one or more financial accounts comprise:

bank accounts.

29. The personal profile database of claim 27 wherein said one or more financial accounts comprise:

credit card accounts.

30. The personal profile database of claim 26 wherein said categories comprise:

message management categories for configuring routing of messages in said system.

31. The personal profile database of claim 30 wherein said messages comprise:

voice messages.

32. The personal profile database of claim 30 wherein said messages comprise:

electronic mail messages.

33. The personal profile database of claim 26 wherein said categories comprise:

sports information categories.

34. The personal profile database of claim 26 wherein said categories comprise:

travel information categories.

35. A method for managing information that is provided to wireless devices comprising the steps of:

creating a personal profile for users of said wireless devices;

correlating said personal profiles with information received in a wireless network; and

transmitting correlated information to said wireless devices.

36. The method of claim 35 wherein said profile creating step comprises the steps of:

selecting specific categories of desired information; and

identifying a specific wireless device that is to receive said desired information.

37. The method of claim 35 wherein said profile creating step comprises the steps of:

maintaining a plurality of personal profiles in a database;

providing said wireless device users with access to said database; and

allowing said users to select one or more options to configure said personal profile.

38. The method of claim 37 wherein said providing step comprises the step of:

accessing said database from a remote computer via an Internet connection.

39. The method of claim 35 wherein said correlating step comprises the steps of:

receiving information from one or more sources; and

identifying specific portions of said received information that have been selected in said personal profile.

40. The method of claim 39 wherein said correlating step is performed by a service control point of a wireless network and wherein said received information is received via an internet connection to said service control point.

41. The method of claim 35 wherein said correlated information is transmitted over a wireless network to a wireless telephone.

42. A system for providing calling services to users of wireless devices, comprising:

a wireless network in communication with said wireless devices;

a service control point (SCP) coupled to said a wireless network for providing call processing services to users of said wireless network; and

a database comprising a plurality of user-configured profiles for providing information to said SCP for delivering calling services.

43. The system of claim 42 further comprising:

an intelligent peripheral (IP) coupled to said SCP, said IP operable to perform call processing tasks using said profile database.

44. The system of claim 42 wherein said SCP operates in conjunction with a service node (SN).

45. The system of claim 42 further comprising:

means for providing said users with access to said profile database; and

means for allowing said users to modify said profiles.

46. The system of claim 45 wherein said users configure said profiles to select particular calling services to be provided by said SCP.

47. The system of claim 45 wherein said users modify said profiles to control how said wireless network processes calls.

48. The system of claim 45 wherein said access providing means comprises an internet connection.

49. A method for delivering calling services in a wireless network, comprising:

storing a plurality of user-configured profiles in a database;

receiving a call in a service control point (SCP) coupled to said wireless network; and

processing said received call to deliver calling services selected in said user-configured profiles.

50. The method of claim 49 further comprising the step of:

processing said received call in an intelligent peripheral (IP) coupled to said SCP.

51. The method of claim 49 wherein said SCP operates in conjunction with a service node.

52. The method of claim 49 further comprising the steps of:

accessing said profile database; and

modifying said user-configured profiles.

53. The method of claim 52 wherein said accessing step is accomplished via an internet connection.

54. The method of claim 52 wherein said users control how said wireless network responds to calls by modifying said profiles.

55. A website for selective access to and from a plurality of users, said website comprising:

means for displaying, to each of said users, a menu of telecommunications network control options available to said each user for controlling telecommunications with respect to said each user;

means for allowing each such user to access a telecommunications profile particular to said user; and

means for accepting, from said each user, changes with respect to said available network control options for inclusion in said user's profile.

56. The invention of claim 55 further comprising:

means for receiving data from one or more telecommunications networks.

57. The invention of claim 56 wherein said receiving means further comprises:

means for scheduling times at which said receiving means access said one or more telecommunications networks; and

means for scheduling sources from which said telecommunications network data is to be received.

58. The invention of claim 56 wherein said receiving means operates in real-time to obtain data from said one or more telecommunications networks while one of said users is accessing said website.

59. The invention of claim 56 wherein said receiving means obtains data from said one or more telecommunications networks at periodic intervals and further comprising:

means for storing said data received from one or more telecommunications networks.

60. The invention of claim 56 wherein said received data corresponds to network control options for each of said users.

61. The invention of claim 56 wherein said received data corresponds to network control options available from said one or more telecommunications networks.

62. A computer program product having a computer readable medium with computer program logic stored thereon for allowing users to access one or more telecommunications networks, said computer program product comprising:

communication means for providing information to and receiving information from one or more telecommunications networks, wherein said information pertains to telecommunications network options available to said users;

means for displaying said received information to said users; and

means for said users configure said telecommunications options.

63. The computer program product of claim 62 wherein said received information further pertains to telecommunications options selected by said users.

64. The computer program product of claim 62 further comprising:

means for selectively scheduling times at which said computer program product accesses said one or more telecommunications networks.

65. The computer program product of claim 62 further comprising:

means for selectively scheduling times at which said one or more telecommunications networks provide said information to said computer program product.

66. The computer program product of claim 62 further comprising a personal computer (PC) for executing said computer program product.

67. The computer program product of claim 66 wherein said communication means comprises:

an internet connection between said PC and said one or more telecommunications networks.

68. The computer program product of claim 66 wherein said communication means comprises:

a direct connection between said PC and said one or more telecommunications networks.

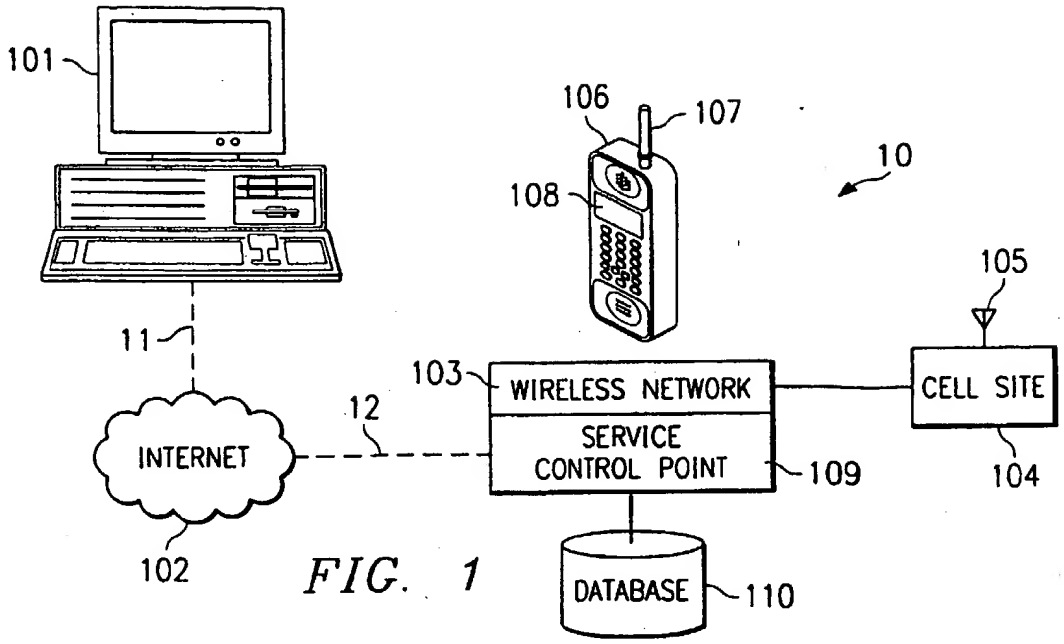


FIG. 1

FIG. 2

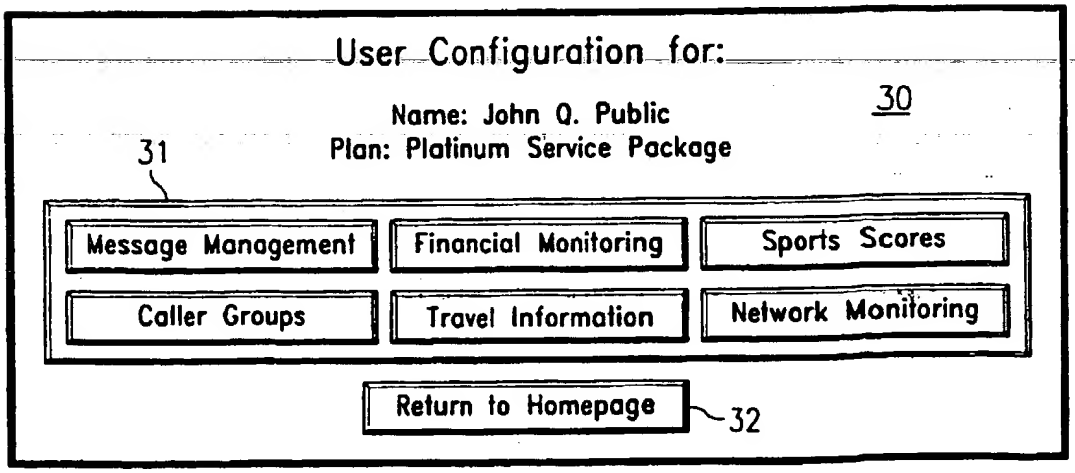


FIG. 3

FIG. 4

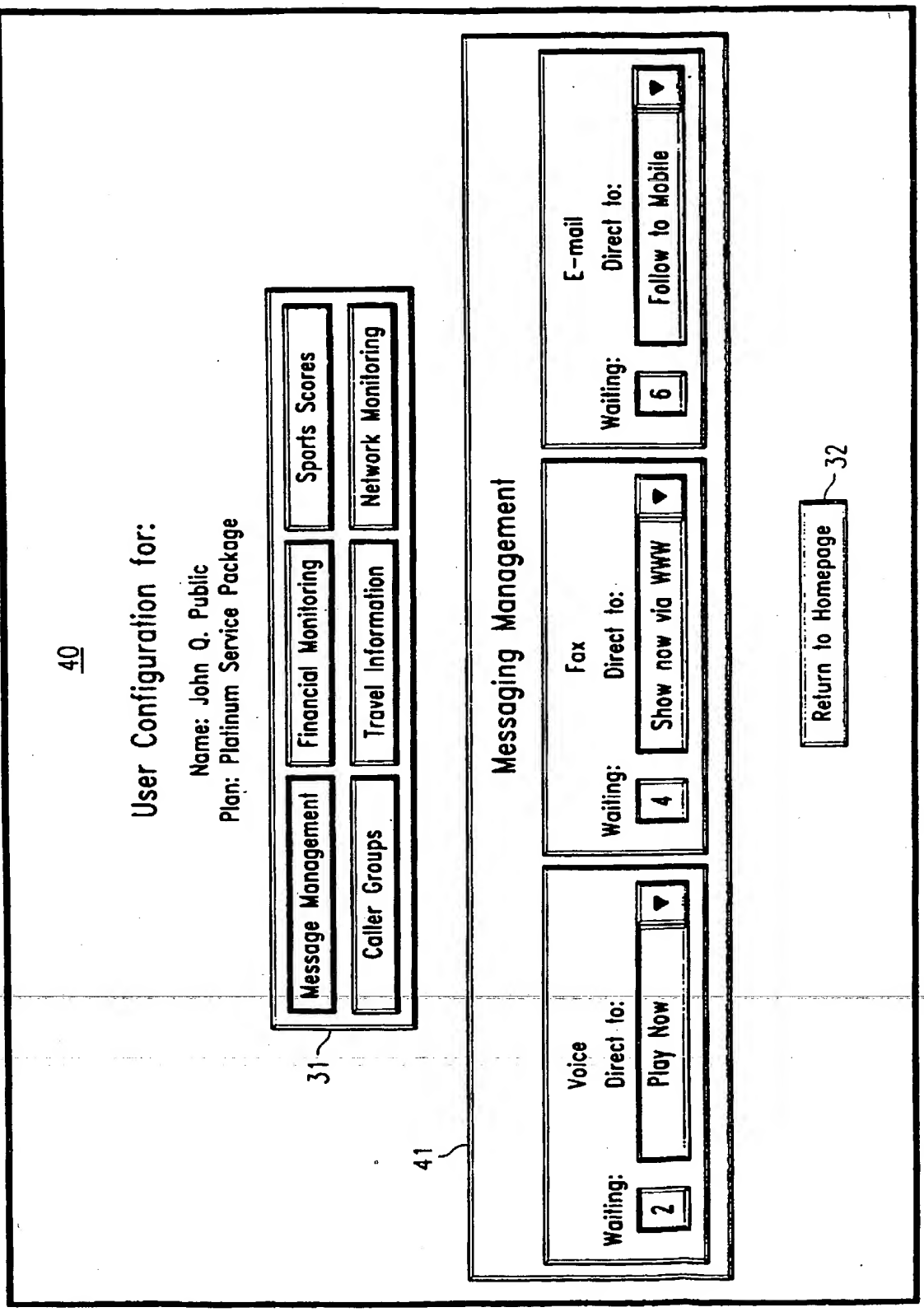
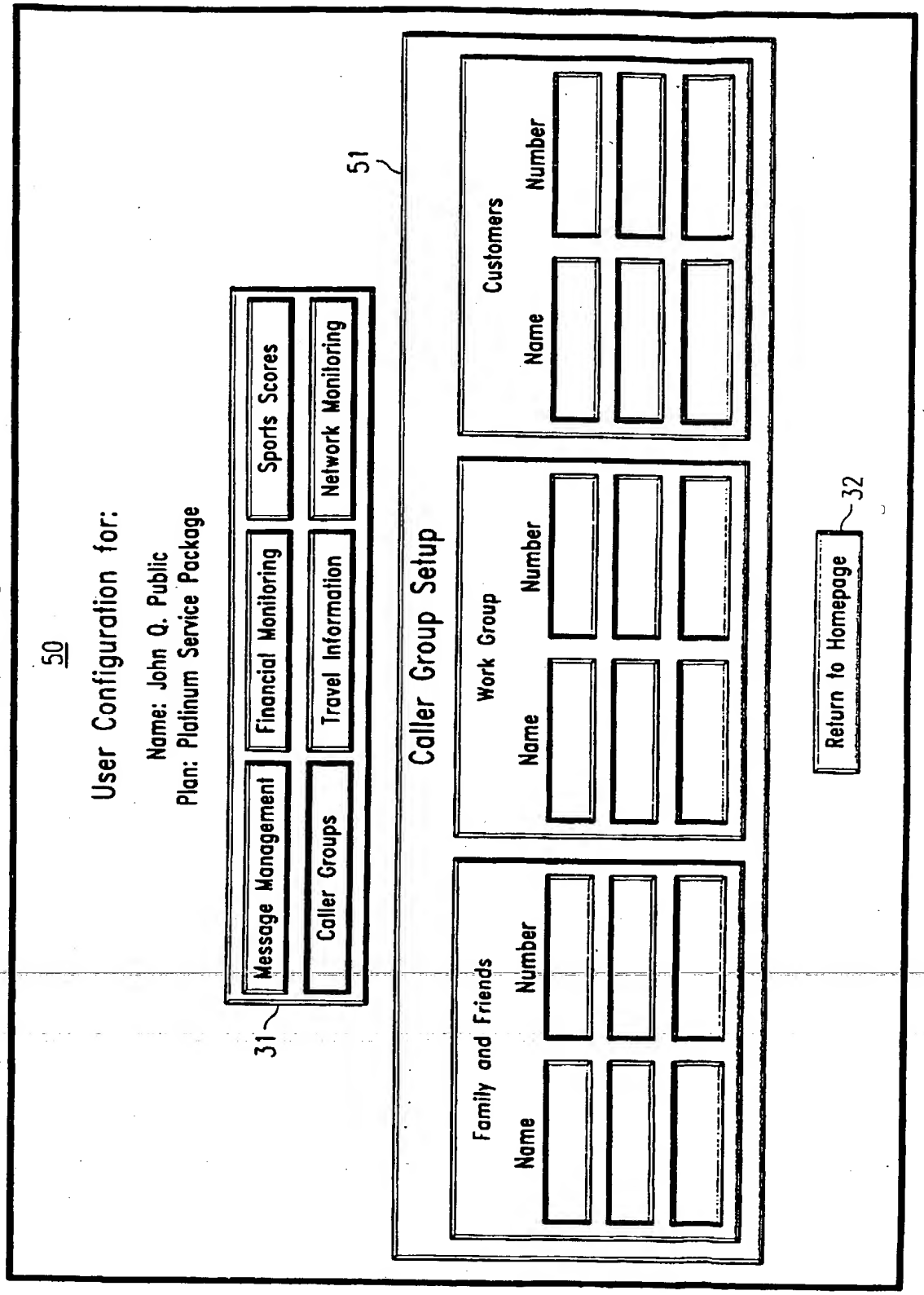

40
User Configuration for:
Name: John Q. Public
Plan: Platinum Service Package
Message Management
Financial Monitoring
Sports Scores
Caller Groups
Travel Information
Network Monitoring
31
41
Messaging Management
Voice
Waiting: 2
Direct to: Play Now
Fax
Waiting: 4
Direct to: Show now via WWW
E-mail
Waiting: 6
Direct to: Follow to Mobile
Return to Homepage
32

FIG. 5



BNSDOCID: <WO _ 9933293A1 | >

FIG. 6

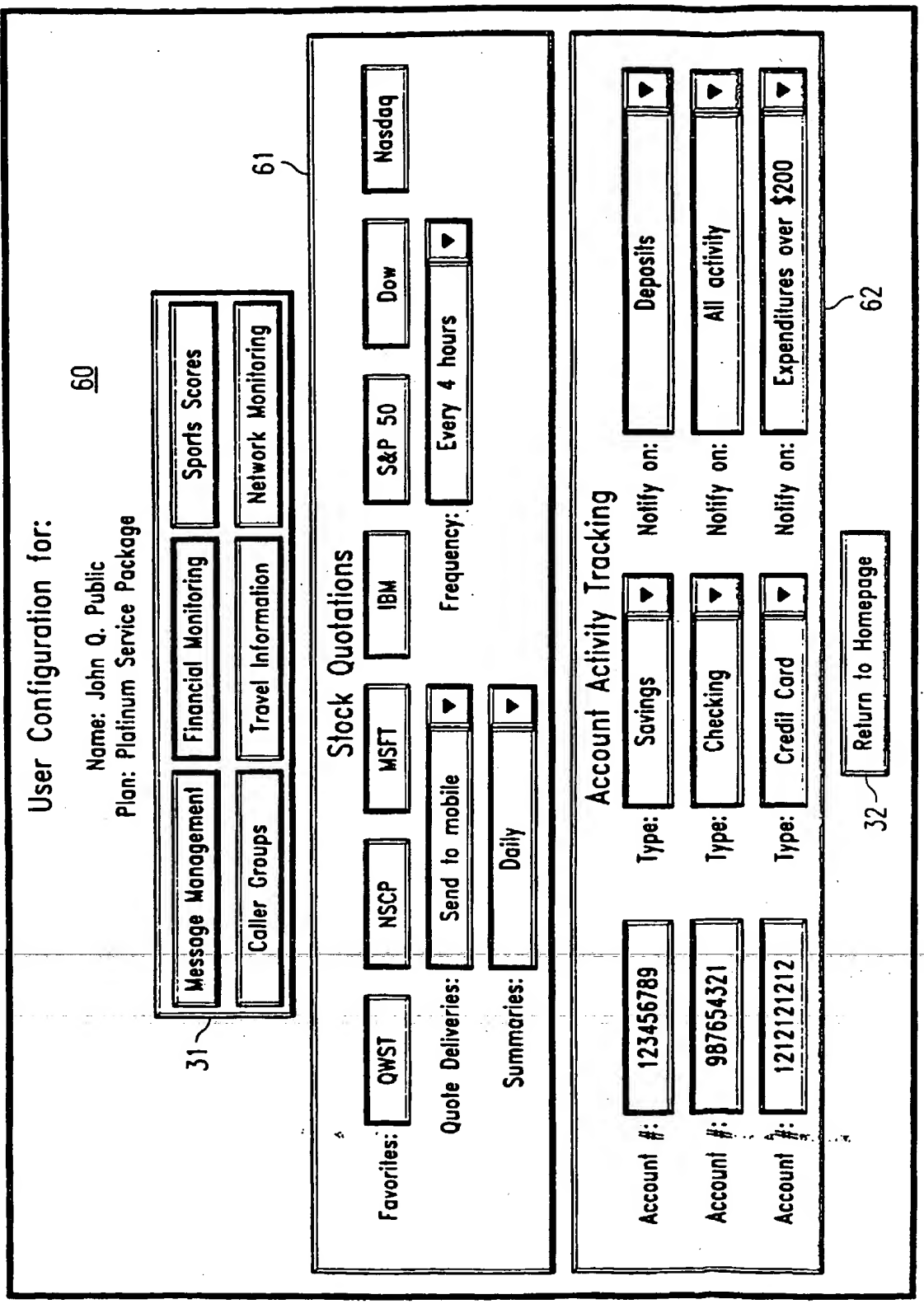

User Configuration for:
60
Name: John Q. Public
Plan: Platinum Service Package
Message Management
Financial Monitoring
Sports Scores
Caller Groups
Travel Information
Network Monitoring
31
61
Stock Quotations
Favorites:
QWST
NSCP
MSFT
IBM
S&P 50
Dow
Nasdaq
Quote Deliveries:
Send to mobile
Frequency:
Every 4 hours
Summaries:
Daily
Account Activity Tracking
Account #:
123456789
Type:
Savings
Notify on:
Deposits
Account #:
987654321
Type:
Checking
Notify on:
All activity
Account #:
1212121212
Type:
Credit Card
Notify on:
Expenditures over $200
62
32
Return to Homepage

FIG. 7

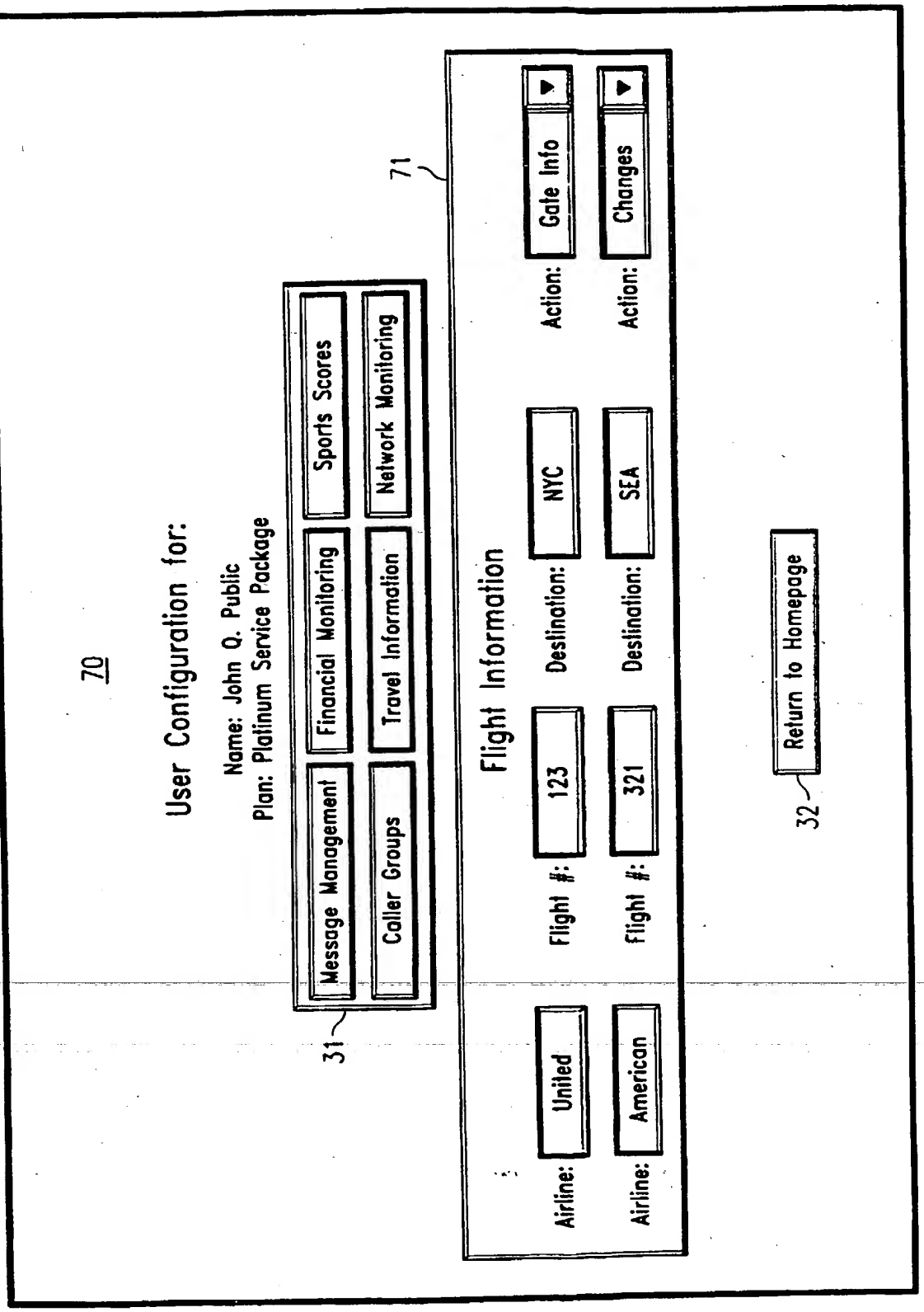
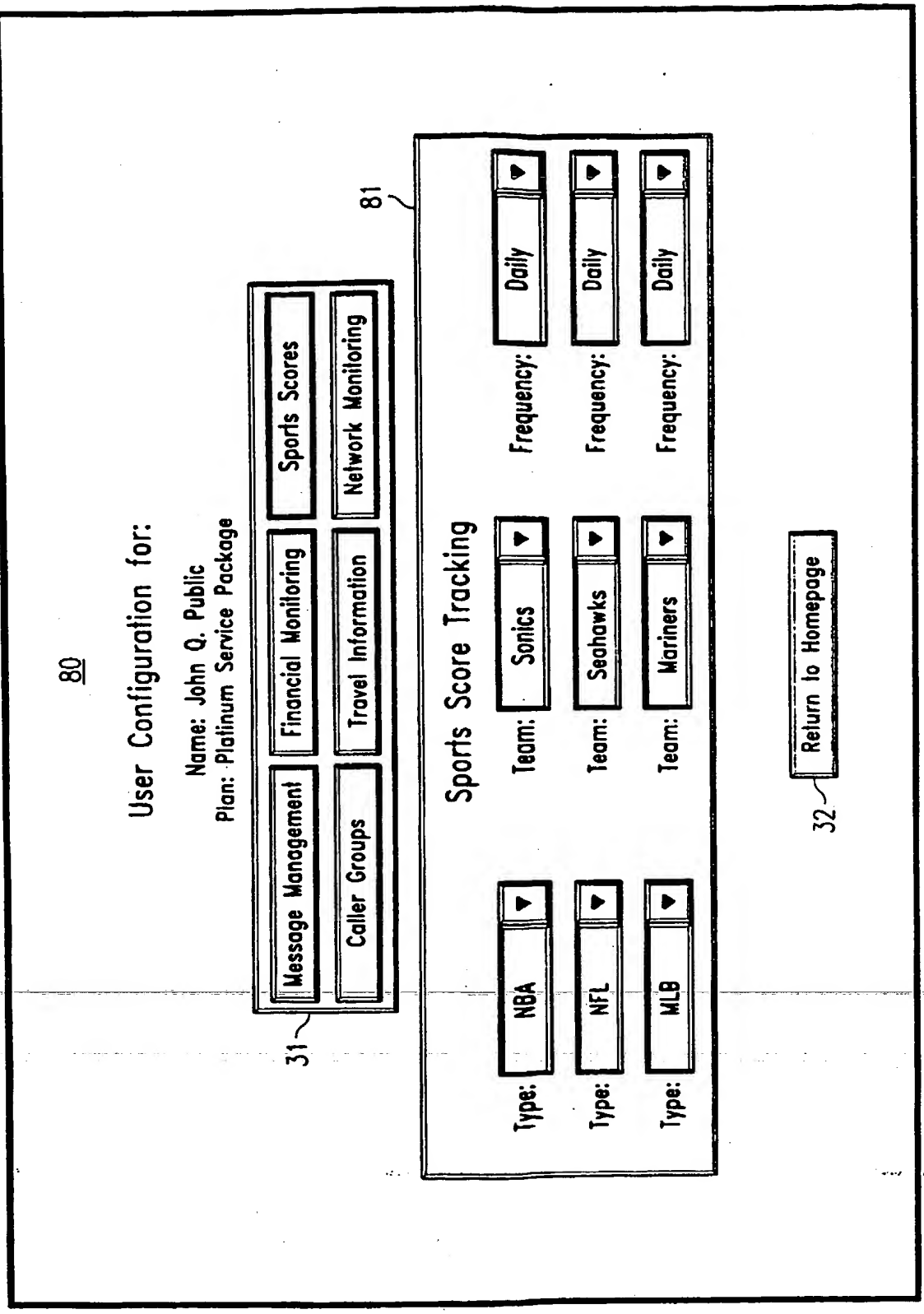

70
User Configuration for:
Name: John Q. Public
Plan: Platinum Service Package
Message Management
Financial Monitoring
Sports Scores
Caller Groups
Travel Information
Network Monitoring
31
71
Flight Information
Airline: United
Flight #: 123
Destination: NYC
Action: Gate Info
Airline: American
Flight #: 321
Destination: SEA
Action: Changes
32
Return to Homepage

FIG. 8


80
User Configuration for:
Name: John Q. Public
Plan: Platinum Service Package
Message Management
Financial Monitoring
Sports Scores
Caller Groups
Travel Information
Network Monitoring
31
81
Sports Score Tracking
Type:
NBA
Team:
Sonics
Frequency:
Daily
Type:
NFL
Team:
Seahawks
Frequency:
Daily
Type:
MLB
Team:
Mariners
Frequency:
Daily
Return to Homepage
32

INTERNATIONAL SEARCH REPORT

Int. ional Application No
PCT/US 98/26785

A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 H04Q7/22 H04Q3/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 6 H04Q H04M

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 97 41654 A (MCLORINAN ANDREW GEORGE ;TSOUKAS GEORGE JAMES (AU); ERICSSON TELEF) 6 November 1997 see abstract see page 6, line 18 - page 7, line 9 see page 10, line 6 - line 18 see page 10, line 28 - page 11, line 5 see figures 1,2 ---	1-68
X	WO 97 23988 A (HARRIS STEPHEN ;BRITISH TELECOMM (GB)) 3 July 1997 see abstract see page 1, line 17 - line 26 see page 6, line 21 - page 7, line 5 see page 10, line 8 - page 11, line 7 see figures 2,3 --- -/--	1-25, 35-58, 60-68

[X] Further documents are listed in the continuation of box C. [X] Patent family members are listed in annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
12 April 1999	16/04/1999

Name and mailing address of the ISA	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Masche, C

Form PCT/ISA/210 (second sheet) (July 1992)

BNSDOCID: <WO__ 9933293A1 | >

INTERNATIONAL SEARCH REPORT

Int. Jonal Application No
PCT/US 98/26785

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication,where appropriate, of the relevant passages	Relevant to claim No.
X	WO 97 47121 A (AT & T CORP) 11 December 1997	1-4,6,7, 9-16,18, 20-25, 35-37, 39, 41-47, 49-54, 62-66,68
A	see abstract see page 7, line 25 - page 8, line 1 see page 9, line 9 - page 10, line 12 see page 14, line 10 - line 14 see page 16, line 9 - line 19 see figure 1 ---	30-32
X	WO 97 33421 A (BELL COMMUNICATIONS RES) 12 September 1997	1-4,6,7, 9-16,18, 20-25, 35-37, 39, 41-47, 49-54, 62,63, 66,68
A	see abstract see page 7, line 23 - page 9, line 28 see page 10, line 1 - line 4 see page 10, line 19 - line 25 see page 15, line 14 - line 32 see page 23, line 13 - line 26 see page 28, line 29 - line 30 see figures 1-4 -----	30-32,58

1

BNSDOCID: <WO__9933293A1 I >

INTERNATIONAL SEARCH REPORT

.nformation on patent family members

Inter ›nal Application No
PCT/US 98/26785

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9741654 A	06-11-1997	AU 2375097 A	19-11-1997
		EP 0864211 A	16-09-1998
WO 9723988 A	03-07-1997	AU 1184997 A	17-07-1997
		CA 2238300 A	03-07-1997
		EP 0868808 A	07-10-1998
		NO 982845 A	22-06-1998
WO 9747121 A	11-12-1997	CA 2228139 A	11-12-1997
		EP 0852870 A	15-07-1998
		JP 10512433 T	24-11-1998
		NO 980460 A	03-02-1998
WO 9733421 A	12-09-1997	AU 5184896 A	22-09-1997

BNSDOCID: <WO_ 9933293A1 I >